

PCT

REC'D 14 APR 2004

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

WIPO

PCT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference PA0489.AP.WO	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/US00/26288	International filing date (day/month/year) 22 September 2000 (22.09.2000)	Priority date (day/month/year) 24 September 1999 (24.09.1999)
International Patent Classification (IPC) or national classification and IPC IPC(7): A63F 9/22 and US Cl.: 463/42		
Applicant SHUFFLE MASTER, INC.		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.

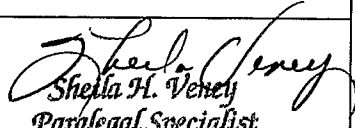
2. This REPORT consists of a total of 6 sheets, including this cover sheet.

☐ This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of sheets.

3. This report contains indications relating to the following items:

- I ☒ Basis of the report
- II ☐ Priority
- III ☐ Non-establishment of report with regard to novelty, inventive step and industrial applicability
- IV ☐ Lack of unity of invention
- V ☒ Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☐ Certain documents cited
- VII ☐ Certain defects in the international application
- VIII ☐ Certain observations on the international application

Date of submission of the demand 23 March 2001 (23.03.2001)	Date of completion of this report 22 March 2004 (22.03.2004)
Name and mailing address of the IPEA/US Mail Stop PCT, Attn: IPEA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Facsimile No. (703)305-3230	Authorized officer  Mark Sager Telephone No. 703 308 0785 Paralegal Specialist Tech. Center 3700

I. Basis of the report1. With regard to the **elements** of the international application:*

- ☒ the international application as originally filed.
- ☒ the description:
pages 1-29 as originally filed
pages NONE, filed with the demand
pages NONE, filed with the letter of _____.

- ☒ the claims:
pages 30-33, as originally filed
pages NONE, as amended (together with any statement) under Article 19
pages NONE, filed with the demand
pages NONE, filed with the letter of _____.

- ☒ the drawings:
pages 1-9, as originally filed
pages NONE, filed with the demand
pages NONE, filed with the letter of _____.

- ☐ the sequence listing part of the description:
pages NONE, as originally filed
pages NONE, filed with the demand
pages NONE, filed with the letter of _____.

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language _____ which is:

- ☐ the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of the translation furnished for the purposes of international preliminary examination (under Rules 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in printed form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages NONE
- ☐ the claims, Nos. NONE
- ☐ the drawings, sheets/fig NONE

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).**

* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17).

** Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.

V. Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**1. STATEMENT**

Novelty (N)	Claims <u>7-17, 21</u>	YES
	Claims <u>1-6, 18-20</u>	NO
Inventive Step (IS)	Claims <u>NONE</u>	YES
	Claims <u>1-21</u>	NO
Industrial Applicability (IA)	Claims <u>1-21</u>	YES
	Claims <u>NONE</u>	NO

2. CITATIONS AND EXPLANATIONS

Please See Continuation Sheet

Supplemental Box

(To be used when the space in any of the preceding boxes is not sufficient)

Claim 1-21 meet the criteria set out in PCT Article 33(4), and thus have industrial applicability because the subject matter claimed can be made or used in industry.

Claims 7-17 and 21 have novelty under PCT Article 33(2) because a gaming device having a universal controller and interface assembly is not taught by the prior art.

Claim 1-6 and 18-20 lack novelty under PCT Article 33(2) as being anticipated by Kennedy.

Regarding claims 1 and 19: Kennedy discloses the following features:

- a) A computerized game controller operable to control a computerized wagering game. See col. 2:20-24, 2:39-3:41, 5:20-58.
- b) A video display device and/or slot display device providing a visual display representation of a signal provide by a computerized game controller such that the video display devices displays at least one image selected from the group of (i) computerized wagering game status information and (ii) symbol elements that change with the play of the wagering game. See id.
- c) A communications port communicatively couple to the computerized game controller. See id.
- d) An interface assembly comprising on or more user interface devices. See id.
- e) An input/output (I/O) interface adapter configured to communicatively couple the interface assembly to the communications port and convert at least some signals between the interface formats supported by the interface assembly and the universal controller. See id.
- f) A communication port connected to gaming peripherals in communication with the computerized gaming controller. See id.
- g) A computerized game controller monitoring through a communication port at least one of coins in/out, currency in/out, debit/credit and cashless events. See id.

Regarding claim 2: Kennedy teaches a game controller that is an IBM PC-compatible computer system. See id.

Regarding claims 3: Kennedy teaches an I/O interface assembly operatively connected to a PC's parallel or serial port. See id. PC-104 and USP ports are equivalent ports known in the art for the same purpose of communicating data between devices.

Regarding claim 4: Kennedy teaches a gaming device having user interfaces including buttons and other devices. See id. Slot-machine arms, joysticks and touch screens are equivalent input devices known in the art for the same purpose of receiving user inputs.

Regarding claims 5 and 6: Kennedy teaches a credit management devices including coin acceptors, coin recognition systems, currency acceptors, currency recognition systems, credit card readers, smart card readers and security device. See id.

Supplemental Box

(To be used when the space in any of the preceding boxes is not sufficient)

Regarding claim 18: Kennedy teaches nonvolatile storage with instructions stored thereon wherein the instructions are executable to cause a computer to execute a video wagering game. See col. 1:33-60, 4:36-44

Regarding claim 20: Kennedy implicitly discloses an embedded motherboard because the controller is embedded in a gaming device rather than an stand-alone unit.

Claims 7 and 8 lack an inventive step under PCT Article 33(3) as being obvious over Kennedy in view of Weiss.

Regarding claims 7 and 8: Kennedy discloses all the features of the instant claims except security devices. Weiss discloses slot machines having tilt switches, integrity switches and discharge detectors to enhance the security of the devices. In view of Weiss, it would have been obvious to a routineer at the time of the invention to modify the gaming device disclosed by Kennedy to add the features of tilt switches, integrity switches and discharge detectors to enhance the security of the devices and thereby reduce operator losses due malfunctions and malfeasance.

Claims 9-15 lack an inventive step under PCT Article 33(3) as being obvious over Marsden in view of Weiss.

Regarding claim 9: Marsden discloses a universal controller useful for retrofitting systems relying on special purpose controllers. See p. 2. It describes special purpose controllers as disadvantageous because they do not allow low-cost, performance enhancing modifications for extending their useful life. See p. 1. Instead, Marsden teaches that universal controllers offer several advantages including (1) allowing one controller to be used for many tasks with few changes to the hardware; (2) reducing to the cost and effort of development; and (3) overcoming the inflexible nature of a legacy controller and the redesign costs limiting to its original, special purpose. See pp. 1-2. Moreover, Marsden suggests that a universal controller would benefit a wide range of commercial applications. See p. 3.

Marsden illustrates what is generally known in industries that rely on electronic processors to control their systems. Namely, it is a common problem to replace obsolete special purpose controllers with modernized ones. As described in Marsden, rather than develop another special purpose processor, a common solution is to purchase a universal processor and customize it to a particular application. A plethora of universal controllers and interface adapter modules are commercially available for this purpose. Notably, vendors typically offer technical assistance to teach a customer how to adapt the controller to their specific application. One of ordinary skill in the art of gaming devices would hold knowledge of the common problem of retrofitting controllers, the commercial availability of off-the-shelf universal controllers, and their potential use as embedded controllers in a gaming device.

In specific regard to the claims, Marsden teaches or suggests all the features of the claims except retrofitting a gaming machine with a translator module for translating event data between system devices and the controller wherein the controller interface operates as an interface between the universal controller and the translator.

By definition, "retrofit" means fitting into equipment already in existence or service; or substituting new or modernized parts or systems for older equipment. See The American Heritage® Dictionary of the English Language, Third Edition copyright © 1992 by Houghton Mifflin Company. One of ordinary skill in the art of gaming would possess knowledge of retrofitting. In terms of a gaming device controller, retrofitting a controller implicitly involves the steps of removing the old controller and substituting a modernized controller. The specific steps of removing, installing and interfacing components are within the ordinary technical knowledge of an artisan.

Kennedy discloses a gaming machine employing a pc-type controller wherein a translator module is used to transmit event data between the game system's devices and the pc-controller. See 2:39-3:42. The reference teaches that the translator module may be required to use a pc-controller in a gaming device to allow it to accommodate the number of communication lines of the various devices. See col. 2:20-24.

In view of Kennedy, it would have been obvious to an routineer at the time of the invention to employ the universal control system disclosed in Marsden, to retrofit a gaming machine with a translator module for translating event data between system devices and the controller wherein the controller interface operates as an interface between the universal controller and the translator. As taught by Marsden, retrofitting a system with a universal controller allows one controller to be used for many tasks with few changes to the hardware; reduce to the cost and effort of development; overcome the inflexible nature of a legacy controller; and the redesign costs limiting to its original, special purpose. See pp. 1-2. Furthermore, as taught by Kennedy, translator module may be required to use a pc-controller in a gaming device to allow it to accommodate the number of communication lines of the various devices. See col. 2:20-24.

Regarding claim 10: Kennedy teaches enabling a video display associated with the game apparatus to provide a visual representation of a signal provided by the computerized game controller such that the video display device displays at least on visual image selected from the groups of (a) computerized game status information (e.g. credits, time, score) and (b) symbol elements that change with the play of the wagering game. See col. 3:12-15.

Supplemental Box

(To be used when the space in any of the preceding boxes is not sufficient)

Regarding claim 11: Kennedy teaches having the game controller be a IBM PC-compatible computer system. See col. 5:2-48.

Regarding claims 12: Kennedy teaches an I/O interface assembly operatively connected to a PC's parallel or serial port. See id. PC-104 and USP ports are equivalent ports known in the art for the same purpose of communicating data between devices.

Regarding claim 13: Kennedy teaches a gaming device having user interfaces including buttons and other devices. See id. Slot-machine arms, joysticks and touch screens are equivalent input devices known in the art for the same purpose of receiving user inputs.

Regarding claims 14 and 15: Kennedy teaches a credit management devices including coin acceptors, coin recognition systems, currency acceptors, currency recognition systems, credit card readers, smart card readers and security device. See id.

Claims 16 and 17 lack an inventive step under PCT Article 33(3) as being obvious over Marsden in view of Kennedy, as applied to claim 9 above, in further view of Weiss.

Regarding claims 16 and 17: Kennedy discloses all the features of the instant claims except security devices. Weiss discloses slot machines having tilt switches, integrity switches and discharge detectors to enhance the security of the devices. In view of Weiss, it would have been obvious to a routineer at the time of the invention to modify the gaming device disclosed by Kennedy to add the features of tilt switches, integrity switches and discharge detectors to enhance the security of the devices and thereby reduce operator losses due malfunctions and malfeasance.

Regarding claim 21: Kennedy implicitly discloses an embedded motherboard because the controller is embedded in a gaming device rather than an stand-alone unit.

----- NEW CITATIONS -----

US 5,688,174 A (KENNEDY) 18 November 1997, see column 1, line 48 to column 5, line 58.

US 5,954,583 A (GREEN) 21 September 1999, see figures 5, 6; column 7, line 64 to column 9, line 32.

US 5,611,730 A (WEISS) 18 March 1997, see figure 3; column 2, lines 50-56, column 11, line 12 to column 14, line 4.

US 5,707,286 A (CARLSON) 13 January 1998, see figures 1-5 and 8.

Marsden et al. Development of a PC-Windows Based Universal Control System. 5th International Conference on FACTORY 2000, Conference Publication Number 435. 4 April 1997, pages 284-287, see all pages.